

Data Validation Checklist Semivolatile Organic Analyses

Project: 35TH Avenue Superfund Site
 Laboratory: TestAmerica – Tampa, FL
 Method: SW-846 8270C Low-Level (PAH)
 Matrix: Soil
 Reviewer: Jane Lindsey
 Concurrence¹: Carol Lovett/Nicole Lancaster

Project No: 15268508.20000
 Job ID.: 680-88767-3
 Associated Samples: Refer to **Attachment A** (Sample Summary)
 Date(s) Collected: 03/26/2013
 Date: 04/10/2013
 Date: 04/24/2013

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
1. Were sample storage and preservation requirements met? If temperature >6°C, then J/UJ-flag results.	✓				
2. Were all COC records signed and integrity seals intact, indicating that COC was maintained for all samples?	✓				
3. Were there any problems noted in laboratory data package concerning condition of samples upon receipt?		✓			
4. Do any soil samples contain more than 50% water? If yes, then results are to be reported on a wet-weight basis.		✓			
5. Were holding times met (≤7 and 14 days from collection to extraction for aqueous and solid samples, respectively; ≤40 days from extraction to analysis)? If not, then J/UJ-flag sample results. If grossly (2x) exceeded, then flag J/R.	✓				
6. Were results for all project-specified target analytes reported?	✓				
7. Were project-specified Reporting Limits achieved for undiluted sample analyses?	✓				
8. Were samples with analyte concentrations exceeding the calibration range of the instrument re-analyzed at a higher dilution? If not, then J-flag sample result.			✓		
9. Was a method blank extracted with each batch (i.e., one per 20 samples, per batch, per matrix and per level)?	✓				
10. Were target analytes detected in the method blank?		✓			
11. Were target analytes detected in equipment/rinsate blanks?		✓		PAH were not detected during the analysis of rinsate blank 032613-RB-Shovel (680-88766-23).	

¹ Independent technical reviewer
 URS Group, Inc.
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Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
12. Are equipment/rinsate blanks associated with every sample? If no, note in DV report.	✓			According to the QAPP, a rinsate blank is to be collected after each decontamination event, which occurs once per week per the client. A rinsate blank (032613-RB-Shovel) was collected during the week of 03/25/2013. The rinsate blank was analyzed for PAHs under Test America Job ID 680-88766-2.	
13. Were analytes detected in samples below the blank contamination action level? If yes, U-flag positive sample results <5x associated blank concentration (10x for common blank contaminants – phthalates)			✓	Blank contamination does not exist.	
14. Is a field duplicate associated with this Job?	✓			CV0509HH-CSD (680-88767-46) is a field duplicate of CV0509HH-CS (680-88767-45).	
15. Was precision deemed acceptable as defined by the project plans?		✓		Refer to Attachment B (Field Duplicate Evaluation)	J
16. Were DFTPP ion abundance criteria (i.e., Table 3 of SW-846 8270C) met? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓			Alternate tuning criteria were used by the laboratory (i.e., EPA Method 525.2). All ion abundance criteria were met per EPA Method 525.2.	
17. Were samples analyzed within 12 hours of the DFTPP tune? If no, professional judgment may be applied to determine to what extent the data may be utilized.	✓				
18. Were initial and continuing calibration standards analyzed at the proper frequency for each instrument? <ul style="list-style-type: none"> Ensure that a minimum of five standards are used for the initial calibration. If no, use professional judgment to determine the effect on the data and note in the reviewer narrative. An initial calibration is to be associated with each sample analysis. A continuing calibration standard is to be analyzed for every 12 hours of sample analysis per instrument. 	✓			<ul style="list-style-type: none"> Initial Calibration: 04/02/2013, instrument BSMC5973 ICV: 04/02/2013 @ 15:34 CCV: 04/05/2013 @ 12:15 	
19. Were calibration results within laboratory/project specifications? <ul style="list-style-type: none"> ICAL (Criteria: ≤ 15 mean %RSD with individual CCC %RSD ≤ 30 ($\leq 50\%$ for poor performers), OR $r \geq 0.995$, OR $r^2 \geq 0.99$, and RRF ≥ 0.050 (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If %RSD > 15 ($> 50\%$ for poor performers), or $r < 0.995$, or $r^2 < 0.995$, then J-flag positive results and UJ-flag non-detects If mean RRF < 0.050 (< 0.010 for poor performers), then 		✓		ICV of 04/02/2013 @ 15:34, instrument BSMC5973: <ul style="list-style-type: none"> Benzo(a)pyrene @ -24.3%D (Lab: ≤ 35, Project: ≤ 20), 75.5%R Benzo(b)fluoranthene @ -21.1%D (Lab: ≤ 35, Project: ≤ 20), 79%R Chrysene @ -23.5%D (Lab: ≤ 35, Project: ≤ 20), 76.5%R Pyrene @ -21.4%D (Lab: ≤ 35, Project: ≤ 20), 	J

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
J-flag positive results and R-flag non-detects <ul style="list-style-type: none"> ICV and CCV (Criteria: $\leq 20\%D$ ($\leq 50\%$ for poor performers) and $RF \geq 0.050$ (≥ 0.010 for poor performers)): <ul style="list-style-type: none"> If $\%D > 20$ ($> 50\%$ for poor performers), then J-flag positive results and UJ-flag non-detects If $RF < 0.050$ (< 0.010 for poor performers), then UJ-flag non-detected semivolatile target compounds 				78.5%R A negative bias is indicated by the ICV percent difference and the above-mentioned analytes were not detected in any sample; therefore, J flag results.	
20. Was a LCS prepared for each batch and matrix?	✓				
21. Were LCS recoveries within lab control limits? If no, J-flag positive results when $\%R > \text{Upper Control Limit (UCL)}$ and J/R-flag results when $\%R < \text{Lower Control Limit (LCL)}$.	✓				
22. Were LCS/LCSD RPD within lab specifications? If no, J-flag positive results and UJ-flag non-detects	✓				
23. Was a MS/MSD pair extracted at the proper frequency (one per 20 samples per batch)?	✓			<ul style="list-style-type: none"> Prep Batch 136087: 680-88767-41 (CV0509DD-CS), MS/MSD Prep Batch 136104: 680-88811-1 (Batch sample), MS/MSD 	
24. Is the MS/MSD parent sample a project-specific sample?	✓	✓			
25. Were MS/MSD recoveries within laboratory/project specifications? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration $> 4x$ spiking level, then an evaluation of interference is not possible. If either MS or MSD recovery meets control limits, qualification of data is not warranted. MS and MSD $\%R < 10$: J and R Flag positive and ND results, respectively MS and MSD $\%R > 10$ and $< \text{LCL}$: J-Flag positive and UJ-flag non-detect results MS and MSD $R\% > \text{UCL}$ (or 140): J-Flag positive results 	✓				
26. Were laboratory criteria met for precision during the MS/MSD analysis? <i>Only QC results for project samples that are reported under this Job ID are evaluated.</i> <ul style="list-style-type: none"> If the native sample concentration $> 4x$ spiking level, then an evaluation of interference is not possible. If $\%RPD > \text{UCL}$, J-flag positive result and UJ-flag non-detect result. 	✓				

Data Validation Checklist (Continued)

Review Questions	Yes	No	N/A	Samples (Analytes) Affected/Comments	Flag
27. Were surrogate recoveries within lab/project specifications? <ul style="list-style-type: none"> If %R <10, then J-flag positive and R-flag non-detect associated sample results If %R >UCL, then J-flag positive results %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results If 1 %R >UCL and 1 %R ≥10%, but <LCL, then J-flag positive results and UJ-flag non-detect results 	✓				
28. Were internal standard (IS) results within lab/project specifications? <ul style="list-style-type: none"> If IS area counts are less than 50% of the midpoint calibration standard, then J-flag positive and UJ-flag non-detect associated sample results If IS area counts are greater than 100% of the midpoint calibration standard, then J-flag positive results If extremely low area counts are reported or performance exhibits a major abrupt drop-off, then a severe loss of sensitivity is indicated, J-flag positive and R-flag non-detect results If retention time of sample's internal standard is not within 30 seconds of the associated calibration standard, R-flag associated data. The chromatographic profile for that sample must be examined to determine if any false positives or negatives exists. For shifts of large magnitude, the reviewer may consider partial or total rejection of the data for that sample fraction. Positive results need not be qualified as R, if mass spectral criteria are met. 	✓				
29. Were lab comments included in report?	✓			Refer to Attachment C (Case Narrative)	
Comments: The data validation was conducted in accordance with the <i>Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1</i> (OTIE, October 2012). The data review process was modeled after the <i>USEPA Contract Laboratory Program (CLP) National Functional Guidelines (NFG) for Organic Methods Data Review</i> (EPA, October 1999) and <i>USEPA CLP NFG for Low Concentration Organic Methods Data Review</i> (EPA, June 2001). Sample results have been qualified based on the results of the data review process (Attachment D). Criteria for acceptability of data were based upon available site information, analytical method requirements, guidance documents, and professional judgment.					

Data Validation Checklist (Continued)

DV Flag Definitions:

- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- R The sample results are unusable. The analyte may or may not be present in the sample.
- U The analyte was analyzed for, but was not detected above the associated level; blank contamination may exist.
- UJ The analyte was not detected above the limit, and the limit is approximate and may be inaccurate or imprecise.

ATTACHMENT A
SAMPLE SUMMARY

SAMPLE SUMMARY

Client: Oneida Total Integrated Enterprises LLC

Job Number: 680-88767-3

Sdg Number: 68088767-3

Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
680-88767-41	CV0509DD-CS	Solid	03/26/2013 1458	03/28/2013 0937
680-88767-41MS	CV0509DD-CS	Solid	03/26/2013 1458	03/28/2013 0937
680-88767-41MSD	CV0509DD-CS	Solid	03/26/2013 1458	03/28/2013 0937
680-88767-42	CV0509EE-CS	Solid	03/26/2013 1510	03/28/2013 0937
680-88767-43	CV0509FF-CS	Solid	03/26/2013 1515	03/28/2013 0937
680-88767-44	CV0509GG-CS	Solid	03/26/2013 1520	03/28/2013 0937
680-88767-45	CV0509HH-CS	Solid	03/26/2013 1530	03/28/2013 0937
680-88767-46	CV0509HH-CSD	Solid	03/26/2013 1532	03/28/2013 0937
680-88767-47	CV0509AG-GS	Solid	03/26/2013 1245	03/28/2013 0937
680-88767-48	CV0509AH-GS	Solid	03/26/2013 1250	03/28/2013 0937
680-88767-49	CV0509AI-GS	Solid	03/26/2013 1325	03/28/2013 0937
680-88767-50	CV0509AJ-GS	Solid	03/26/2013 1330	03/28/2013 0937
680-88767-51	CV0509AK-GS	Solid	03/26/2013 1535	03/28/2013 0937
680-88767-52	CV0509AL-GS	Solid	03/26/2013 1537	03/28/2013 0937
680-88767-53	CV0509AM-GS	Solid	03/26/2013 1539	03/28/2013 0937
680-88767-54	CV0509AN-GS	Solid	03/26/2013 1540	03/28/2013 0937

ATTACHMENT B
FIELD DUPLICATE EVALUATION

Evaluation of Field Duplicate Results

Attachment B

Analyte	CV0509HH-CS 9680-88767-45)	RL	CV0509HH-CSD (680-88767-46)	RL	Unit	Avg. RLx5	RPD	Absolute difference	2x Avg RL	Action	
Acenaphthene	98	J	120	J	120	µg/kg	600	NA	59	240	None, absolute difference ≤ 2x Avg RL
Acenaphthylene	25	J	47	J	49	µg/kg	240	NA	1	96	None, absolute difference ≤ 2x Avg RL
Anthracene	250		110	10	µg/kg	49.75	78	NA	NA	J/UJ-flag, RPD > 50%	
Benzo(a)anthracene	760		440	9.8	µg/kg	48	53	NA	NA	J/UJ-flag, RPD > 50%	
Benzo(a)pyrene	610		360	13	µg/kg	62.5	52	NA	NA	J/UJ-flag, RPD > 50%	
Benzo(b)fluoranthene	890		590	15	µg/kg	72.5	41	NA	NA	None, RPD ≤ 50%	
Benzo(g,h,i)perylene	400		270	24	µg/kg	120	39	NA	NA	None, RPD ≤ 50%	
Benzo(k)fluoranthene	490		210	9.8	µg/kg	48	80	NA	NA	J/UJ-flag, RPD > 50%	
Chrysene	700		470	11	µg/kg	55	39	NA	NA	None, RPD ≤ 50%	
Dibenzo(a,h)anthracene	130		75	24	µg/kg	120	NA	55	48	J/UJ-flag, absolute difference > 2x Avg RL	
Fluoranthene	1700		850	24	µg/kg	120	67	NA	NA	J/UJ-flag, RPD > 50%	
Fluorene	100		24	24	µg/kg	120	NA	76	48	J/UJ-flag, absolute difference > 2x Avg RL	
Indeno(1,2,3-cd)pyrene	360		200	24	µg/kg	120	57	NA	NA	J/UJ-flag, RPD > 50%	
1-Methylnaphthalene	60		38	J	49	µg/kg	240	NA	22	96	None, absolute difference ≤ 2x Avg RL
2-Methylnaphthalene	70		40	J	49	µg/kg	240	NA	30	96	None, absolute difference ≤ 2x Avg RL
Naphthalene	89		36	J	49	µg/kg	240	NA	53	96	None, absolute difference ≤ 2x Avg RL
Phenanthrene	1200		460	9.8	µg/kg	48	89	NA	NA	J/UJ-flag, RPD > 50%	
Pyrene	1400		720	24	µg/kg	120	64	NA	NA	J/UJ-flag, RPD > 50%	

Note: If the analyte was not detected, then the cell was left blank.

µg/kg - micrograms per kilogram

J - Estimated value

NA - Not applicable

RL - Reporting limit

RPD - Relative percent difference

UJ - Not detected and the limit is estimated

Precision is based on either the absolute difference between sample results or RPD. If the sample results are less than or equal to 5x's the RL, then precision is based on the absolute difference between duplicate results. If sample results >5x's RL, then precision is evaluated using RPD. J-Flag sample results whenever the absolute difference is greater than the RL (2x for soils) or the RPD >20% (50% for soil). Table above presents the results for detected analytes only.

ATTACHMENT C
CASE NARRATIVE

CASE NARRATIVE

Client: Oneida Total Integrated Enterprises LLC

Project: 35th Avenue Superfund Site

Report Number: 680-88767-3

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

RECEIPT

The samples were received on 03/28/2013; the samples arrived in good condition, properly preserved and on ice. The temperature of the coolers at receipt was 1.4 C.

SEMIVOLATILE ORGANIC COMPOUNDS BY GCMS - LOW LEVEL

Samples CV0509DD-CS (680-88767-41), CV0509EE-CS (680-88767-42), CV0509FF-CS (680-88767-43), CV0509GG-CS (680-88767-44), CV0509HH-CS (680-88767-45), CV0509HH-CSD (680-88767-46), CV0509AG-GS (680-88767-47), CV0509AH-GS (680-88767-48), CV0509AI-GS (680-88767-49), CV0509AJ-GS (680-88767-50), CV0509AK-GS (680-88767-51), CV0509AL-GS (680-88767-52), CV0509AM-GS (680-88767-53) and CV0509AN-GS (680-88767-54) were analyzed for Semivolatile Organic Compounds by GCMS - Low Level in accordance with EPA SW-846 Method 8270C. The samples were prepared on 04/03/2013 and 04/04/2013 and analyzed on 04/05/2013.

Samples CV0509GG-CS (680-88767-44)[4X], CV0509AG-GS (680-88767-47)[4X], CV0509AH-GS (680-88767-48)[4X], CV0509AI-GS (680-88767-49)[4X] and CV0509AL-GS (680-88767-52)[4X] required dilution prior to analysis. The reporting limits have been adjusted accordingly.

Several analytes recovered outside the recovery criteria low for the MS/MSD of sample 680-88811-1 in batch 660-136171.

No other difficulties were encountered during the SVOAs analyses.

All other quality control parameters were within the acceptance limits.

ATTACHMENT D
QUALIFIED SAMPLE RESULTS

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509DD-CS

Lab Sample ID: 680-88767-41

Date Collected: 03/26/13 14:58

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 82.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Acenaphthylene	11	J	49	6.1	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Anthracene	23		10	5.1	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Benzo[a]anthracene	150		9.8	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Benzo[a]pyrene	120	J	13	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Benzo[b]fluoranthene	210	J	15	7.4	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Benzo[g,h,i]perylene	99		24	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Benzo[k]fluoranthene	79		9.8	4.4	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Chrysene	150	J	11	5.5	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Dibenz(a,h)anthracene	36		24	5.0	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Fluoranthene	210		24	4.9	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Fluorene	17	J	24	5.0	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Indeno[1,2,3-cd]pyrene	99		24	8.7	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
1-Methylnaphthalene	31	J	49	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
2-Methylnaphthalene	29	J	49	8.7	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Naphthalene	37	J	49	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Phenanthrene	110		9.8	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Pyrene	180	J	24	4.5	ug/Kg	☆	04/03/13 15:12	04/05/13 17:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	68		30 - 130				04/03/13 15:12	04/05/13 17:15	1

Client Sample ID: CV0509EE-CS

Lab Sample ID: 680-88767-42

Date Collected: 03/26/13 15:10

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 65.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	30	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Acenaphthylene	9.2	J	60	7.5	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Anthracene	23		13	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Benzo[a]anthracene	92		12	5.9	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Benzo[a]pyrene	61	J	16	7.8	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Benzo[b]fluoranthene	78	J	18	9.2	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Benzo[g,h,i]perylene	45		30	6.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Benzo[k]fluoranthene	65		12	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Chrysene	89	J	14	6.8	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Dibenz(a,h)anthracene	15	J	30	6.2	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Fluoranthene	150		30	6.0	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Fluorene	15	J	30	6.2	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Indeno[1,2,3-cd]pyrene	38		30	11	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
1-Methylnaphthalene	18	J	60	6.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
2-Methylnaphthalene	33	J	60	11	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Naphthalene	40	J	60	6.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Phenanthrene	160		12	5.9	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Pyrene	130	J	30	5.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:10	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	56		30 - 130				04/03/13 15:12	04/05/13 18:10	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509FF-CS

Lab Sample ID: 680-88767-43

Date Collected: 03/26/13 15:15

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 70.3

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	28	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Acenaphthylene	10	J	57	7.1	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Anthracene	30		12	6.0	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Benzo[a]anthracene	160		11	5.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Benzo[a]pyrene	120	J	15	7.4	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Benzo[b]fluoranthene	190	J	17	8.7	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Benzo[g,h,i]perylene	99		28	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Benzo[k]fluoranthene	89		11	5.1	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Chrysene	140	J	13	6.4	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Dibenz(a,h)anthracene	34		28	5.8	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Fluoranthene	250		28	5.7	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Fluorene	17	J	28	5.8	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Indeno[1,2,3-cd]pyrene	71		28	10	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
1-Methylnaphthalene	38	J	57	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
2-Methylnaphthalene	58		57	10	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Naphthalene	46	J	57	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Phenanthrene	180		11	5.6	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Pyrene	230	J	28	5.3	ug/Kg	☆	04/03/13 15:12	04/05/13 18:28	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	63		30 - 130				04/03/13 15:12	04/05/13 18:28	1

Client Sample ID: CV0509GG-CS

Lab Sample ID: 680-88767-44

Date Collected: 03/26/13 15:20

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 85.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	460	U	460	91	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Acenaphthylene	27	J	180	23	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Anthracene	40		38	19	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Benzo[a]anthracene	350		37	18	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Benzo[a]pyrene	300	J	47	24	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Benzo[b]fluoranthene	490	J	56	28	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Benzo[g,h,i]perylene	280		91	20	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Benzo[k]fluoranthene	230		37	16	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Chrysene	360	J	41	21	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Dibenz(a,h)anthracene	68	J	91	19	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Fluoranthene	390		91	18	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Fluorene	23	J	91	19	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Indeno[1,2,3-cd]pyrene	190		91	32	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
1-Methylnaphthalene	83	J	180	20	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
2-Methylnaphthalene	69	J	180	32	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Naphthalene	79	J	180	20	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Phenanthrene	230		37	18	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Pyrene	360	J	91	17	ug/Kg	☆	04/03/13 15:12	04/05/13 18:47	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	91		30 - 130				04/03/13 15:12	04/05/13 18:47	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509HH-CS

Lab Sample ID: 680-88767-45

Date Collected: 03/26/13 15:30

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 84.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	98	J	120	24	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Acenaphthylene	25	J	47	5.9	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Anthracene	250	J	9.9	5.0	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Benzo[a]anthracene	760	J	9.4	4.6	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Benzo[a]pyrene	610	J	12	6.1	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Benzo[b]fluoranthene	890	J	14	7.2	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Benzo[g,h,i]perylene	400	J	24	5.2	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Benzo[k]fluoranthene	490	J	9.4	4.2	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Chrysene	700	J	11	5.3	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Dibenz(a,h)anthracene	130	J	24	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Fluoranthene	1700	J	24	4.7	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Fluorene	100	J	24	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Indeno[1,2,3-cd]pyrene	360	J	24	8.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
1-Methylnaphthalene	60	J	47	5.2	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
2-Methylnaphthalene	70	J	47	8.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Naphthalene	89	J	47	5.2	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Phenanthrene	1200	J	9.4	4.6	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Pyrene	1400	J	24	4.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:05	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	61		30 - 130				04/03/13 15:12	04/05/13 19:05	1

Client Sample ID: CV0509HH-CSD

Lab Sample ID: 680-88767-46

Date Collected: 03/26/13 15:32

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 81.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	39	J	120	24	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Acenaphthylene	24	J	49	6.1	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Anthracene	110	J	10	5.1	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Benzo[a]anthracene	440	J	9.8	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Benzo[a]pyrene	360	J	13	6.3	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Benzo[b]fluoranthene	590	J	15	7.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Benzo[g,h,i]perylene	270	J	24	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Benzo[k]fluoranthene	210	J	9.8	4.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Chrysene	470	J	11	5.5	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Dibenz(a,h)anthracene	75	J	24	5.0	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Fluoranthene	850	J	24	4.9	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Fluorene	24	J	24	5.0	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Indeno[1,2,3-cd]pyrene	200	J	24	8.7	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
1-Methylnaphthalene	38	J	49	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
2-Methylnaphthalene	40	J	49	8.7	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Naphthalene	36	J	49	5.4	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Phenanthrene	460	J	9.8	4.8	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Pyrene	720	J	24	4.5	ug/Kg	☆	04/03/13 15:12	04/05/13 19:23	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	55		30 - 130				04/03/13 15:12	04/05/13 19:23	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509AG-GS

Lab Sample ID: 680-88767-47

Date Collected: 03/26/13 12:45

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 78.4

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	510	U	510	100	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Acenaphthylene	41	J	200	25	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Anthracene	110		42	21	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Benzo[a]anthracene	420		40	20	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Benzo[a]pyrene	320	J	53	26	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Benzo[b]fluoranthene	420	J	62	31	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Benzo[g,h,i]perylene	230		100	22	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Benzo[k]fluoranthene	290		40	18	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Chrysene	410	J	46	23	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Dibenz(a,h)anthracene	64	J	100	21	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Fluoranthene	640		100	20	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Fluorene	39	J	100	21	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Indeno[1,2,3-cd]pyrene	190		100	36	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
1-Methylnaphthalene	57	J	200	22	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
2-Methylnaphthalene	67	J	200	36	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Naphthalene	67	J	200	22	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Phenanthrene	390		40	20	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Pyrene	560	J	100	19	ug/Kg	☆	04/03/13 15:12	04/05/13 19:42	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	112		30 - 130				04/03/13 15:12	04/05/13 19:42	4

Client Sample ID: CV0509AH-GS

Lab Sample ID: 680-88767-48

Date Collected: 03/26/13 12:50

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 76.7

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	520	U	520	100	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Acenaphthylene	49	J	210	26	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Anthracene	170		44	22	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Benzo[a]anthracene	680		42	20	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Benzo[a]pyrene	550	J	54	27	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Benzo[b]fluoranthene	730	J	64	32	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Benzo[g,h,i]perylene	400		100	23	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Benzo[k]fluoranthene	340		42	19	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Chrysene	600	J	47	23	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Dibenz(a,h)anthracene	130		100	21	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Fluoranthene	1100		100	21	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Fluorene	72	J	100	21	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Indeno[1,2,3-cd]pyrene	310		100	37	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
1-Methylnaphthalene	78	J	210	23	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
2-Methylnaphthalene	97	J	210	37	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Naphthalene	89	J	210	23	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Phenanthrene	790		42	20	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Pyrene	1000	J	100	19	ug/Kg	☆	04/03/13 15:12	04/05/13 20:00	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	84		30 - 130				04/03/13 15:12	04/05/13 20:00	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509AI-GS

Lab Sample ID: 680-88767-49

Date Collected: 03/26/13 13:25

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 74.5

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	530	U	530	110	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Acenaphthylene	39	J	210	26	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Anthracene	50		44	22	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Benzo[a]anthracene	330		42	21	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Benzo[a]pyrene	320	J	55	27	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Benzo[b]fluoranthene	580	J	64	32	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Benzo[g,h,i]perylene	330		110	23	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Benzo[k]fluoranthene	150		42	19	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Chrysene	360	J	48	24	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Dibenz(a,h)anthracene	110		110	22	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Fluoranthene	480		110	21	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Fluorene	110	U	110	22	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Indeno[1,2,3-cd]pyrene	290		110	38	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
1-Methylnaphthalene	100	J	210	23	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
2-Methylnaphthalene	90	J	210	38	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Naphthalene	92	J	210	23	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Phenanthrene	270		42	21	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Pyrene	380	J	110	20	ug/Kg	✱	04/03/13 15:12	04/05/13 20:18	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	91		30 - 130				04/03/13 15:12	04/05/13 20:18	4

Client Sample ID: CV0509AJ-GS

Lab Sample ID: 680-88767-50

Date Collected: 03/26/13 13:30

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 74.0

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels									
Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	27	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Acenaphthylene	24	J	54	6.8	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Anthracene	39		11	5.7	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Benzo[a]anthracene	220		11	5.3	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Benzo[a]pyrene	220	J	14	7.1	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Benzo[b]fluoranthene	360	J	17	8.3	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Benzo[g,h,i]perylene	190		27	6.0	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Benzo[k]fluoranthene	110		11	4.9	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Chrysene	260	J	12	6.1	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Dibenz(a,h)anthracene	73		27	5.6	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Fluoranthene	380		27	5.4	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Fluorene	19	J	27	5.6	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Indeno[1,2,3-cd]pyrene	140		27	9.6	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
1-Methylnaphthalene	44	J	54	6.0	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
2-Methylnaphthalene	61		54	9.6	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Naphthalene	54		54	6.0	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Phenanthrene	230		11	5.3	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Pyrene	370	J	27	5.0	ug/Kg	✱	04/03/13 15:12	04/05/13 20:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	59		30 - 130				04/03/13 15:12	04/05/13 20:37	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509AK-GS

Lab Sample ID: 680-88767-51

Date Collected: 03/26/13 15:35

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 68.8

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	140	U	140	29	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Acenaphthylene	16	J	58	7.2	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Anthracene	43		12	6.1	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Benzo[a]anthracene	140		12	5.6	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Benzo[a]pyrene	91	J	15	7.5	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Benzo[b]fluoranthene	130	J	18	8.8	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Benzo[g,h,i]perylene	51		29	6.4	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Benzo[k]fluoranthene	66		12	5.2	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Chrysene	130	J	13	6.5	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Dibenz(a,h)anthracene	31		29	5.9	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Fluoranthene	270		29	5.8	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Fluorene	27	J	29	5.9	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Indeno[1,2,3-cd]pyrene	48		29	10	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
1-Methylnaphthalene	21	J	58	6.4	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
2-Methylnaphthalene	20	J	58	10	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Naphthalene	12	J	58	6.4	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Phenanthrene	190		12	5.6	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Pyrene	200	J	29	5.4	ug/Kg	☆	04/04/13 10:07	04/05/13 21:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	56		30 - 130				04/04/13 10:07	04/05/13 21:32	1

Client Sample ID: CV0509AL-GS

Lab Sample ID: 680-88767-52

Date Collected: 03/26/13 15:37

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 83.2

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	480	U	480	96	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Acenaphthylene	53	J	190	24	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Anthracene	93		40	20	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Benzo[a]anthracene	330		38	19	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Benzo[a]pyrene	320	J	50	25	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Benzo[b]fluoranthene	470	J	58	29	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Benzo[g,h,i]perylene	230		96	21	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Benzo[k]fluoranthene	180		38	17	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Chrysene	450	J	43	22	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Dibenz(a,h)anthracene	110		96	20	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Fluoranthene	560		96	19	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Fluorene	32	J	96	20	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Indeno[1,2,3-cd]pyrene	220		96	34	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
1-Methylnaphthalene	100	J	190	21	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
2-Methylnaphthalene	140	J	190	34	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Naphthalene	89	J	190	21	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Phenanthrene	380		38	19	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Pyrene	590	J	96	18	ug/Kg	☆	04/04/13 10:07	04/05/13 21:50	4
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	108		30 - 130				04/04/13 10:07	04/05/13 21:50	4

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)

Client Sample Results

Client: Oneida Total Integrated Enterprises LLC
Project/Site: 35th Avenue Superfund Site

TestAmerica Job ID: 680-88767-3
SDG: 68088767-3

Client Sample ID: CV0509AM-GS

Lab Sample ID: 680-88767-53

Date Collected: 03/26/13 15:39

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 82.6

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	120	U	120	24	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Acenaphthylene	48	U	48	6.0	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Anthracene	12		10	5.0	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Benzo[a]anthracene	79		9.6	4.7	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Benzo[a]pyrene	67	J	12	6.2	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Benzo[b]fluoranthene	100	J	15	7.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Benzo[g,h,i]perylene	52		24	5.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Benzo[k]fluoranthene	45		9.6	4.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Chrysene	78	J	11	5.4	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Dibenz(a,h)anthracene	23	J	24	4.9	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Fluoranthene	120		24	4.8	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Fluorene	6.7	J	24	4.9	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Indeno[1,2,3-cd]pyrene	48		24	8.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
1-Methylnaphthalene	20	J	48	5.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
2-Methylnaphthalene	35	J	48	8.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Naphthalene	26	J	48	5.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Phenanthrene	63		9.6	4.7	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Pyrene	93	J	24	4.4	ug/Kg	☆	04/04/13 10:07	04/05/13 22:09	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	58		30 - 130				04/04/13 10:07	04/05/13 22:09	1

Client Sample ID: CV0509AN-GS

Lab Sample ID: 680-88767-54

Date Collected: 03/26/13 15:40

Matrix: Solid

Date Received: 03/28/13 09:37

Percent Solids: 66.9

Method: 8270C LL - Semivolatile Organic Compounds by GCMS - Low Levels

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acenaphthene	150	U	150	30	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Acenaphthylene	7.9	J	59	7.4	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Anthracene	13		12	6.2	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Benzo[a]anthracene	95		12	5.8	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Benzo[a]pyrene	69	J	15	7.7	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Benzo[b]fluoranthene	110	J	18	9.0	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Benzo[g,h,i]perylene	100		30	6.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Benzo[k]fluoranthene	41		12	5.3	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Chrysene	61	J	13	6.7	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Dibenz(a,h)anthracene	21	J	30	6.1	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Fluoranthene	100		30	5.9	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Fluorene	30	U	30	6.1	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Indeno[1,2,3-cd]pyrene	41		30	11	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
1-Methylnaphthalene	25	J	59	6.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
2-Methylnaphthalene	31	J	59	11	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Naphthalene	27	J	59	6.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Phenanthrene	67		12	5.8	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Pyrene	100	J	30	5.5	ug/Kg	☆	04/04/13 10:07	04/05/13 22:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl	56		30 - 130				04/04/13 10:07	04/05/13 22:27	1

TestAmerica Savannah

Sample results have been qualified by URS in accordance with the Non-Industrial Use Property Sampling Event QAPP for the 35th Avenue Removal Site, Birmingham, Alabama, Revision 1 (OTIE, October 2012)